Best practices for effective designs in election administration

Section 3: Optical scan ballots

Draft: May 2007



# Optical scan ballots

The general election ballot prototypes shown on the following pages are based on Voluntary Voting System Best practices (VVSG), information design principles and usability testing. These best practices, principles, and tests lead to the following key criteria and goals:

- Design for all voters: Emphasize voter needs over administrative and vendor requirements.
- Use clear, concise language (simple language) for all content.
- Use color functionally and exclusively for instructions.
- Use illustrative diagrams that accurately reflect the ballot type and equipment to further clarify instructions and processes.
- Use upper and lower case sans serif type, set at a minimum of 12 points for all ballot content voters will read. Given a choice between adequate type size (12 points) and fewer pages, ballots with 12 point type and more pages were found to be more usable than those with fewer pages and smaller type.
- Use one language per ballot, which is recommended practice. To meet usability standards display no more than two languages.

For other recommendations, see the Design and Samples sections below.

Prototype ballots shown on the following pages are not endorsements of a particular ballot manufacturer. They are used to illustrate design standards and usability findings. These component-based design standards can be applied to a variety of ballot types.

### Digital files and downloads

Electronic versions of these files are available at: www.eac.gov/directory\_name.

The files are provided in two formats: Acrobat (.pdf) and InDesign (.indd).

Note: The use of any specific product is not an endorsement of that product. The design standards illustrated throughout this document do not rely on specific software or products. For copyright reasons, the EAC cannot supply you with the fonts used in the InDesign files. They are from the Univers family and are available from numerous suppliers.

### Research findings

Detailed findings that support the ballot design best practices can be found in Section 7 of this document, and at www.eac.gov/directory\_name.

### Section organization

This section has three sections: (1) planning; (2) one-language ballot design best practices and samples; and (3) two-language ballot design best practices and samples.

### **Planning**

The Planning section (pages XXX–XXX) outlines how to incorporate resources into your ballot development and production process; in what areas those resources may be of assistance; and when those activities should occur. It also offers tips on possible challenges and opportunities. These suggestions apply to both one-language and two-language ballots.

#### Design

For both one-language ballots (page XXX) and two-language ballots (page XXX), prototypes are illustrated in full and by *component*. The production *specifications* for those components are detailed, and items of note are under the *discussion* heading.

#### Components

A ballot has four basic content areas:

- A Election information (e.g., jurisdiction, general election, date)
- Ballot instructions
- Ballot navigation, including page numbers and reminders to vote on the other side or go on to the next page
- Questions, including contests, retentions, and referendum

Each of these components is illustrated at its actual size and production specifications are detailed on the facing page. Specifications are numbered from

1 through 6

### Specifications

All production specifications—including type face, type size, leading, line weights, background tint fills, and distances between elements—are included. These specifications allow information designers to build best practice ballots.

#### Discussion

Non-specification notes, comments and references (such as production best practices and legislative requirements) are listed under this heading.

### **Samples**

In the Samples sections (pages XXX) the design best practices and components are applied to the various one-language ballots (page XXX) and various two-language ballots (page XXX). The variations include two ballot styles: a one-color version and a non western-language version.

# Planning process

The planning table on the following page outlines additional resources and steps you can take to ensure that ballot content and design best serve the voter.

These recommendations are based on best practices in use in Cook County, Illinois, and Design for Democracy's pilot test in Nebraska.

### Planning goals

These additional resources can help ensure that

- Content is easily understood by all voters, including those with low vision and literacy issues.
- The visual organization of the content supports ease of use and confidence in the process.
- Any necessary translations are accurate and sensitive to cultural differences in language and expression.

### Planning value by role/resource

- Simple language expert ensures that instructions and other ballot content are
  written in the most effective manner to help all voters (not just low-literacy voters)
  understand and follow instructions, and feel confident that they have properly cast
  their ballots.
- Information designer organizes the ballot content—text, graphics, illustrations—in a manner that is clear, simple and functional, and that supports and enhances the voter's comprehension of the content and voting process. (Note: The design field is very broad; it is important to work with a designer who has expertise in the organization and presentation of complex information.)
- Usability expert works with the information designer to develop review, testing, and revision processes that improve the ballot's overall effectiveness, accuracy, and usability.
- Translator ensures proper grammatical, syntactic, and structural character of the content, and appropriate use of local dialect variations. Accurate translations are vital for non-English speaking voters, and online translations online misleading, unclear, or simply wrong. The EAC can provide some model translations.
- Cultural expert reviews translated material to ensure that the translations accurate are and culturally relevant, and that their visual presentation is appropriate.

Resources	Planning, design, and usability activities	Tips	
Election Official	Use current election to establish baseline for future work you are planning. Get voter feedback before starting not just afterwards. (EAC can provide a revised satisfaction survey.)		
	Establish an approval process/team. Determine who must sign off on improvements at each phase.		
Election Official	Choose an objective, professional resource to take ownership of information design challenges.	Whenever possible, hire a local person who will be able to meet with you and your extended production team (vendors, printers, etc.).	
	Simultaneously hire a designer and a usability professional who can offer additional feedback.	Provide the designer with poll worker training, as well as any feedback from voters or poll workers.	
	Partner with a policy advisor who can help guide design improvements through the necessary legislative processes.	Provide the designer with a complete list of current election documents and legal requirements.	
Designer and Usability Expert	Review and become familiar with election design standards and recommendations.		
	Understand variance between EAC best practices and local requirements for poll worker and voter materials.		
Election Official	Estimate value of design improvements.  Gauge impact of the redesign process during the next election planning cycle.		
During election cy	ycle		
Resources	Content development activities	Tips	
Simple Language Expert	Edit final English-language content for low-literacy voters.	The EAC has some translations that can be leveraged and modified, but you will need expert assistance on referendum.	
Translator	Translate content for non-English-speaking voters.	Understand the translator's requirements before election: data formats, time line, etc.	
		Have a third-party expert review the translated materials after the initial draft. Legal may need to review the materials after simple language and design have been incorporated.	
Alternative language/ cultural expert	Review translated content in each alternative language for cultural relevancy.	Translation services may not be aware of possible cultural sensitivities of translated material.	
Designer	Election official provides designer with final content for different materials, in English and other languages, after they have been reviewed		

other languages, after they have been reviewed by simple language and cultural experts.

# Design: one language

On pages XXX–XXX, design best practices for a general election one-language ballot are illustrated and their production specifications detailed. These best practices are based on are based on VVSG, information design principles and usability testing.

### Components

A ballot has four basic content areas:

- A Election information (e.g., jurisdiction, general election, and date)
- Ballot instructions
- © Ballot navigation, including page numbers and reminders to vote on the other side or go on to the next page
- Questions, including contests, retentions and referendum

Each of these components is illustrated at its full size and production specifications are detailed on the facing page. Specifications are numbered from through 6

### **Specifications**

All production specifications—including type face, type size, leading, line weights, tint fills and distances between elements—are included. These specifications allow information designers to build best practices ballots.

### **Discussion**

Non-specification notes, comments and references, such as production best practices and legislative requirements, may be listed under this heading.

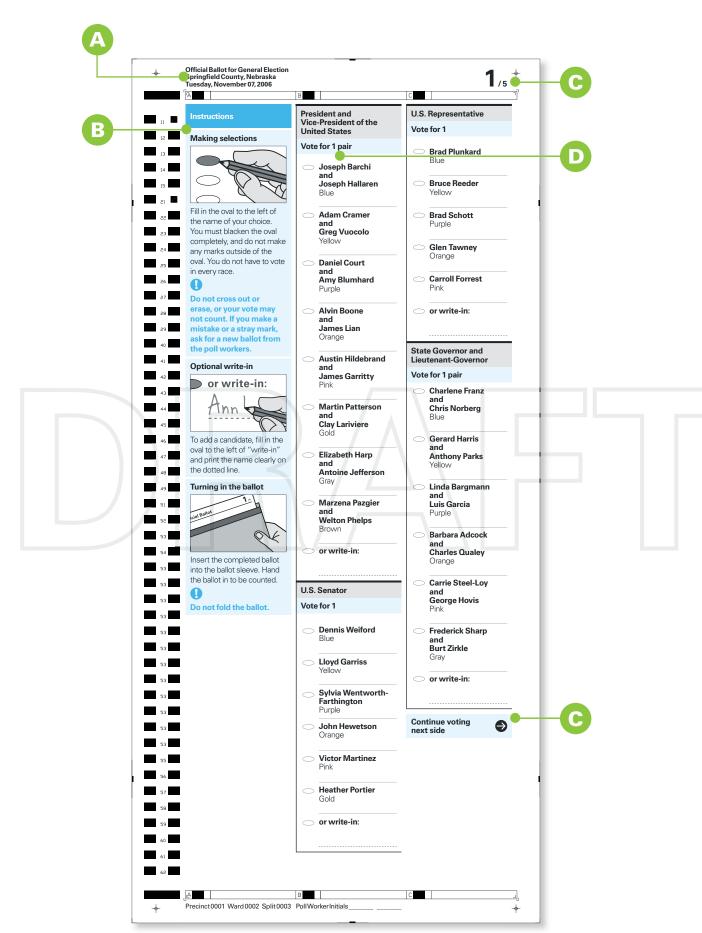
Prototype ballots shown on the following pages are not endorsements of a particular ballot manufacturer. They are used to illustrate design standards and usability findings. These component-based design standards can be applied to a variety of ballot types.

### **Research findings**

Additional research findings that further support the following ballot design best practices can be found in Section 7 of this document and at www.eac.gov/directory\_name.

Design

One language



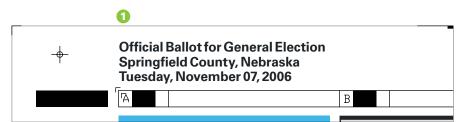
**DRAFT** 

3.8 Optical scan ballots

Design

One language

Election information



100% actual size



3.9 Optical scan ballots

Design

One language

Election information

### **Election information specifications**

Information defining the specifics of the election should be placed above the left column of the face of every ballot page outside the area used by the voter and the scanner. Content should include the statement "Official Ballot" along with election type, location and date. Local laws may require that additional information be included.

### 1 Information

On ballots with space constraints, election information may be set at a minimum size. For ballots with more available space, larger type is encouraged.

Minimum size type for all: Univers 65 Bold, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Maximum size type for title: Univers 65 Bold, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

Maximum size type for location and date: Univers 65 Bold, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

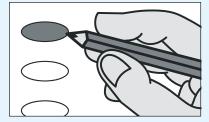
### **Discussion**

Though this is important content it should not be set so large that it affects the amount of room for instructions and ballot content actually used by the voter.



4

### **Making selections**

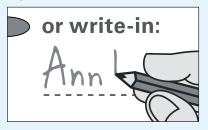


Fill in the oval to the left of the name of your choice. You must blacken the oval completely, and do not make any marks outside of the oval. You do not have to vote in every race.



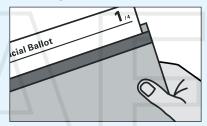
Do not cross out or erase, or your vote may not count. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.

### **Optional write-in**



To add a candidate, fill in the oval to the left of "write-in" and print the name clearly on the dotted line.

### **Turning in the ballot**



Insert the completed ballot into the ballot sleeve. Hand the ballot in to be counted.



Do not fold the ballot.

all 100% actual size

### **Ballot instruction specifications**

Specifications for each instruction element are referenced by number below.

### Main head

This header defines the complete instructions area for the voter.

Fill: 100% process cyan, 0.5" height, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### 2 Background fill

3 pt. white line between background tint and main head. 3 pt. white line between each instruction.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type for each instruction.

#### Subhead

Begins 0.1" below top of fill.

*Type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

### 4 Illustration

Begins 0.1" below lowest baseline of title.

Size: 0.1" inset from column width on both sides; height determined by most effective display of illustration (typically 1" to 2").

Stroke: 0.5 pt. line, 100% black.

### **5** Instruction text

Begins 0.1" below bottom of illustration.

*Type:* Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

### 6 Alerts

These should be used only for critical instructions, such as actions that may invalidate a voter's ballot. Begins 0.1" below lowest baseline of instruction content.

Attention icon: 0.25" diameter, 100% process cyan, set 0.1" from left edge of fill.

*Type:* Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill and 0.1" below Attention icon.

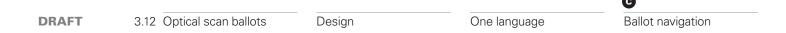
#### Discussion

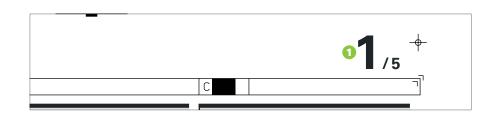
The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

Illustrative diagrams that accurately reflect the ballot type and equipment further clarify instructions and processes.

These illustrations are available at www.eac.gov/directory\_name.

Informational icons are used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.





Continue voting next side

Continue voting next page

Thank you for voting! Please turn in your finished ballot

all 100% actual size

### **Ballot navigation specifications**

Specifications for each instruction element are referenced by number below.

### Page numbering

Current and total page numbers should be placed in the top right corner of each face of every ballot page.

Current page type: Univers 65 Bold, size 36 pt., tracking -20, 100% black.

*Total page type:* Univers 65 Bold, size 12 pt., tracking -20, 100% black.

### 2 Instruction fill

Navigational instructions should be placed at the end of the final column on each ballot face, to tell the voter what to do next.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

### Instruction content

Begins 0.1" below top of fill.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### Arrow

Use the Arrow icon to direct the voter to another location on the ballot.

Arrow icon: 0.25" diameter, 100% black, set 0.1" from right edge of fill, centered between top and bottom of fill.

#### Discussion

These ballot navigation guides help the voters through the ballot, telling them where they are in the process and where to go next.

Ballot pages should be numbered with large, bold numbers.

Informational icons such as arrows and exclamation points (next page) can be used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov/directory\_name.

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.



	D	Λ		T
u	n.	м	г	

3.14 Optical scan ballots

Design

One language

Contest questions

U.S.	Senator
Vote	e for 1
	<b>Dennis Weiford</b> Blue
	<b>Lloyd Garriss</b> Yellow
	Sylvia Wentworth- Farthington Purple
	<b>John Hewetson</b> Orange
	<b>Victor Martinez</b> Pink
	Heather Portier Gold
	or write-in:

# State Governor and Lieutenant-Governor

### Vote for 1 pair

- Charlene Franz and Chris Norberg Blue
- Gerard Harris and Anthony Parks Yellow
- Linda Bargmann and Luis Garcia Purple
- Barbara Adcock and Charles Qualey Orange
- Carrie Steel-Loy and George Hovis Pink
- Frederick Sharp and Burt Zirkle Gray
- or write-in:

### Board of Education Member: City of Springfield

Uvote for up to 5

- Alex Marr
- Albert Musgrove
- Thomas Fleming
- Harriett Watson
- Theodore Fina
- Steven Williams
- Peter Sigelakis
- Deborah Barkelow
- or write-in:
- or write-in:
  - or write-in:
- or write-in:
  - or write-in:

all 100% actual size

#### **Contest question specifications**

Contest question components include borders that separate each contest, titles, special instructions, candidate/ticket information and choices.

### Border

This border defines the top, left and bottom sides of the contest component.

Top line: 3.0 pt. line, 100% black, extends full width of the column.

Left: line 1.0 pt. line, 100% black.

Bottom line: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

#### Contest title

This header defines each contest question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

*Type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### 3 Contest instructions

This area defines each contest's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

*Type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### Special instructions

When new or modified instructions are introduced, they should be called out to alert the voter. These are set identically to standard contest instructions, with the addition of an Attention icon.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Attention icon: 0.15" diameter, 100% process cyan, set 0.1" from left edge of fill, centered between top and bottom of fill.

*Type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon, centered between top and bottom of fill.

#### **Discussion**

Informational icons such as exclamation points and arrows are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov/directory\_name.

The use of political party icons is not encouraged as literacy experts and design professionals believe they simply confuse many voters.

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

6

6

**U.S. Senator** 

Blue

Dennis Weiford

Lloyd Garriss

Sylvia Wentworth-Farthington

John Hewetson

Victor Martinez

Heather Portier

or write-in:

Yellow

Purple

Orange

Pink

Gold

Vote for 1

Carrie Steel-Loy and **George Hovis** Pink

Frederick Sharp and **Burt Zirkle** Gray

or write-in:

or write-in:

or write-in:

or write-in:

all 100% actual size

### Contest question specifications, continued

### Candidate information

Candidate names section begins no less than 0.1" below bottom of instructions fill; on ballots with set selection locations, the distance may need to be greater. Subsequent names should begin 0.1" below separation line of previous candidate. Names should be set as close as possible to the selection location.

*Name type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Party type: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned. On contests with a two-person ticket, the word "and" should be placed alone on a separate line between the two candidate names.

### 6 Separation line

Each candidate option should be followed by a line, even if it is the final option in a particular contest. Line should be placed no less than 0.1" below the lowest baseline of candidate information; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following candidate name, if applicable.

*Line:* 0.25 pt. line, 100% black, extends full width of column area allowed for candidates.

### Write-in

Begins 0.1" below final line of previous candidate. Write-in line should be placed no less than 0.3" below lowest baseline of type; on ballots with set selection locations, the distance may need to be greater.

*Type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Write-in line: 0.5 pt. line, dashed 4 pt./4 pt., 100% black, extends full width of column area allowed for candidates.

#### **Discussion**

All candidates in any given contest should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the candidate/ ticket name as shown on page XXX.



### Judge Retention: State Supreme Court

### Vote to keep or remove

Keep **Elmer Hull** as Associate Justice of the State Supreme Court?

- Keep Judge
- Remove Judge
- Judge Retention: State Supreme Court

1

4

6

- **Output** Vote to keep or remove
  - Keep **Susan Esquer** as Associate Justice of the State Court of Appeals, 5th Appellate District, Division 2?
  - Keep Judge
  - Remove Judge

### Judge Retention: State Supreme Court

## Vote to keep or remove

Keep **Rita Zheng** as Associate Justice of State Family Court, 3rd District?

- Keep Judge
- Remove Judge

100% actual size

### **Retention question specifications**

Retention guestion components include borders that separate each question, titles, special instructions, the question and the choices.

### Border

This border defines the top, left and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

### Retention title

This header defines each retention question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### **Retention instructions**

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### Retention content

Presents the question clearly to the voter. The judge's name should be bold to add emphasis. Begins no less than 0.1" below bottom of instructions fill.

Content type: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

Name type: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

### **Retention selection options**

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location.

Option type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

### Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender

of the following option, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of column area allowed for selection options.

#### Discussion

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

All names in any given retention guestion should all be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the judge's name as shown on page XXX.

Requires primary elections where voters may vote for any state or federal candidate egardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments.  Accept  Reject  Relication on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced.  Unknown potential costs to local governments, depending on the extent to which	Ballot Measure 101: Open Primaries
regardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments.  Accept  Reject  Ballot Measure 106: Limits on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	Vote to accept or reject
Reject  Ballot Measure 106: Limits on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	Requires primary elections where voters may vote for any state or federal candidate regardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments.
Reject  Ballot Measure 106: Limits on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced.  Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	
Ballot Measure 106: Limits on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	
Limits on Private Enforcement of Unfair Business Competition Laws  Vote to accept or reject  Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	Ballot Measure 106:
Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	Limits on Private Enforcement of Unfair Business Competition Laws
only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced."	Vote to accept or reject
	only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or
Accept	Unknown potential costs to local governments, depending on the extent to which

One language

Referendum

100% actual size

3.20 Optical scan ballots

Design

**DRAFT** 

### Referendum specifications

Referendum question components include borders that separate each question, titles, instructions, the question and the choices.

### Border

This border defines the top, left and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the referendum area.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the referendum area; placed 0.1" below last content in referendum area.

### Referendum title

This header defines each referendum question; it begins directly below the top border.

Fill: 15% black, extends full width of the referendum area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### Referendum instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the referendum area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

### Referendum content

Presents the referendum question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill, set 0.1" from left border. In a two-column referendum area, space for text should extend to 0.1" from the right edge of the referendum area. In a three-column referendum area, the space for text should extend no wider than 6".

Content type: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

### 6 Referendum selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location, ideally in the leftmost column of the referendum area.

Option type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

### Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

*Line:* 0.25 pt. line, 100% black, extends full width of referendum area allowed for selection options.

#### Discussion

A primary voter criticism of ballots is the length and complexity of referendum questions. It is imperative that these questions be written in the simplest language possible. Many jurisdictions also provide summaries.

The typesetting of the referendum text is critical. Too many or too few characters per line inhibit legibility and comprehension. The goal should be 40–60 characters per line. Research indicates that many users find line lengths of more than 60 characters or less than 20 characters hard to read.

There is a direct relationship between type size and line spacing (leading). Lines of type that are too close together or too far apart inhibit legibility and comprehension (as do lines that are too far apart). Referendum content in these best practices are set at 12 points, with 2 points of leading.

# Samples: one language

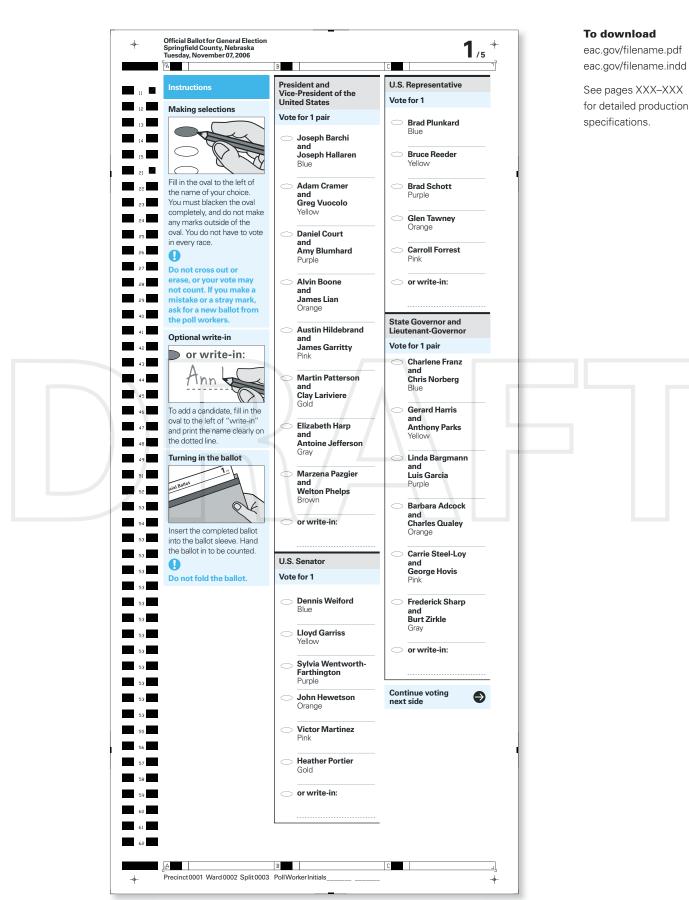
The design best practices detailed in the previous section are applied to various one-color ballots on pages XXX–XXX. The variations include two ballot styles, a one-color version and a Asian language version.

Specifications that vary from those outlined in the Design section are detailed opposite the application example. The samples illustrate the flexibility of the design best practices.

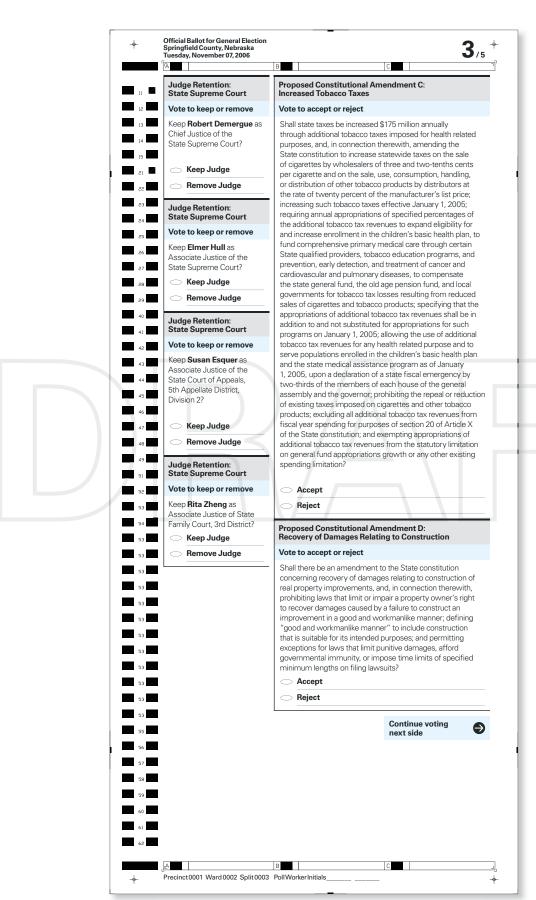
The ballot content used in these samples was originally developed by the National Institute of Standards and Technology (NIST) to illustrate a "moderately complex" ballot. Although it is impossible to cover every ballot scenario, most general election ballot layout issues can be addressed using this content.

The samples shown on the following pages are not endorsements of a particular ballot manufacturer. They are used to illustrate design standards and usability findings.





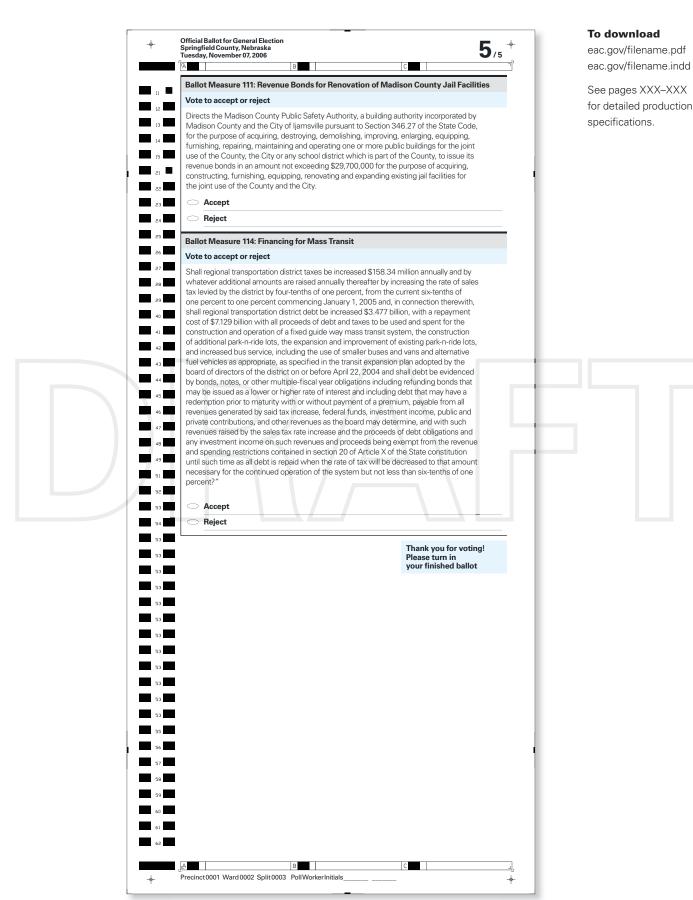
50% actual size



To download

eac.gov/filename.pdf eac.gov/filename.indd

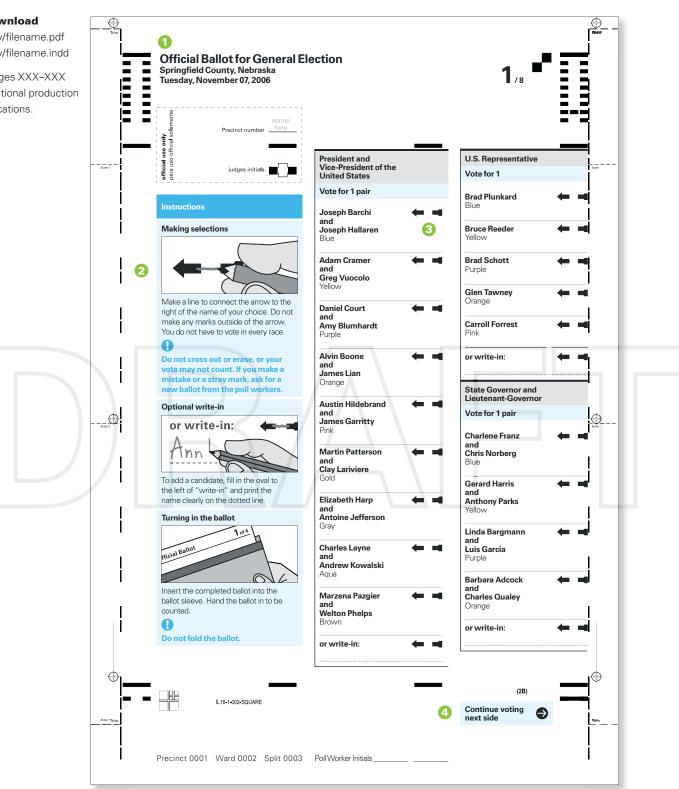
See pages XXX–XXX for detailed production specifications.



#### To download

eac.gov/filename.pdf eac.gov/filename.indd

See pages XXX-XXX for additional production specifications.



50% actual size

3.27 Optical scan ballots Samples One language Version B

### **Version B specifications**

Alterations to the specifications noted on pages XXX–XXX are noted below.

### Election information

If space allows, the election information component may be made larger so the voter can easily identify it. See page XXX for more information on this component.

### Voting instructions

Both text and illustrations of the voting instructions should be developed to correspond precisely with the details of your particular ballot. See page XXX for more information about this component.

### 3 Variations in selection method

On some ballot types the selection location is to the right of the candidates name. In these cases, place the selection options 0.1" from the left border of the column.

### Ballot navigation

In certain circumstances, navigation instructions may not be allowed in "active" or "live" areas of the ballot. In these cases, place the instructions as close to the bottom of the right-most column as permitted.

DRAFT	3 28	Optical	scan	hallots
	0.20	Optical	Scari	Danots

Samples

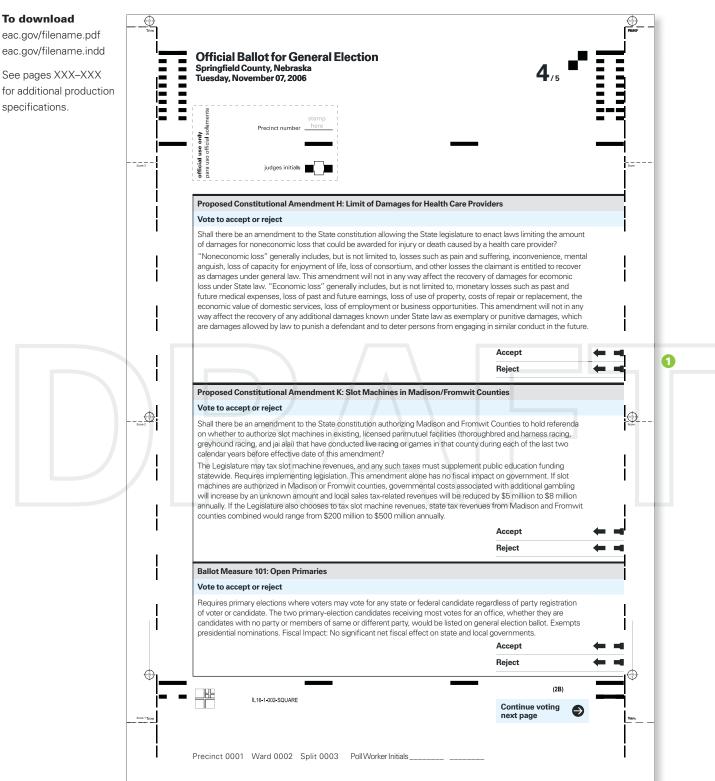
One language

Version B

#### To download

eac.gov/filename.pdf eac.gov/filename.indd

See pages XXX-XXX for additional production



50% actual size

DRAFT 3	.29 Optical s	can ballots	Samples	One language	Version B

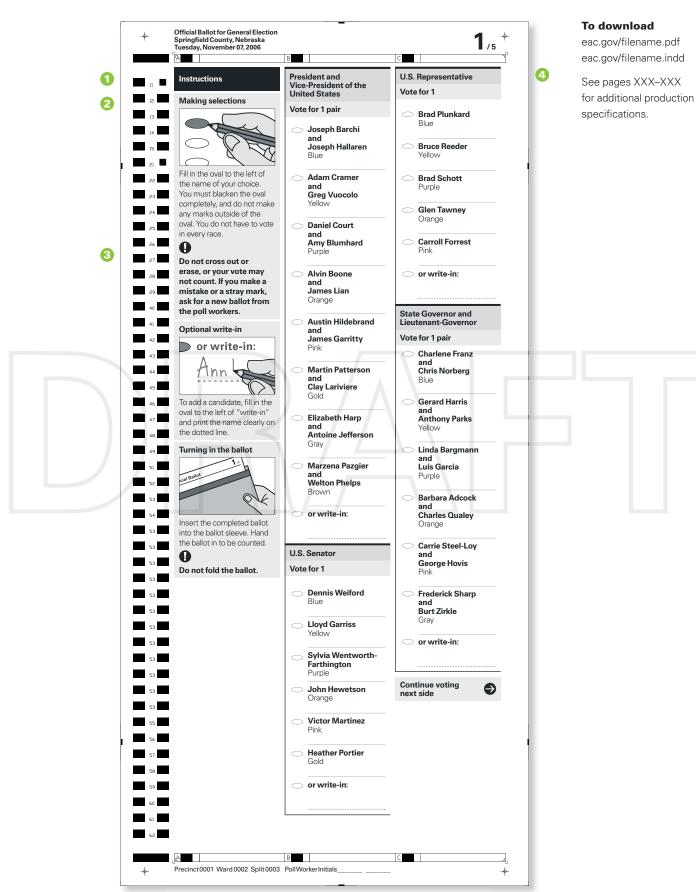
### **Version B specifications**, continued

Alterations to the specifications on pages XXX–XXX are noted below.

### 1 Referendum selection options

On some ballot types the selection options for multiple-column questions are placed only in the right-most column of the referendum area. In these cases, the separation lines should extend only the width of that column. See page XXX for more information about this component.





### **One-color version specifications**

If circumstances dictate that ballots be printed in only one color, certain adjustments should be made to the specifications.

### 1 Instruction title

Rather than process cyan, this title should be 100% black.

### Instructional fills

For all background fills change from process cyan to 10% black. This includes the fills used with all ballot instructions, question instructions, and all navigational instructions.

### 3 Attention icons

Rather than process cyan, all Attention icons should be 100% black. This includes icons for critical ballot instructions, as well as special question instructions.

### Question titles

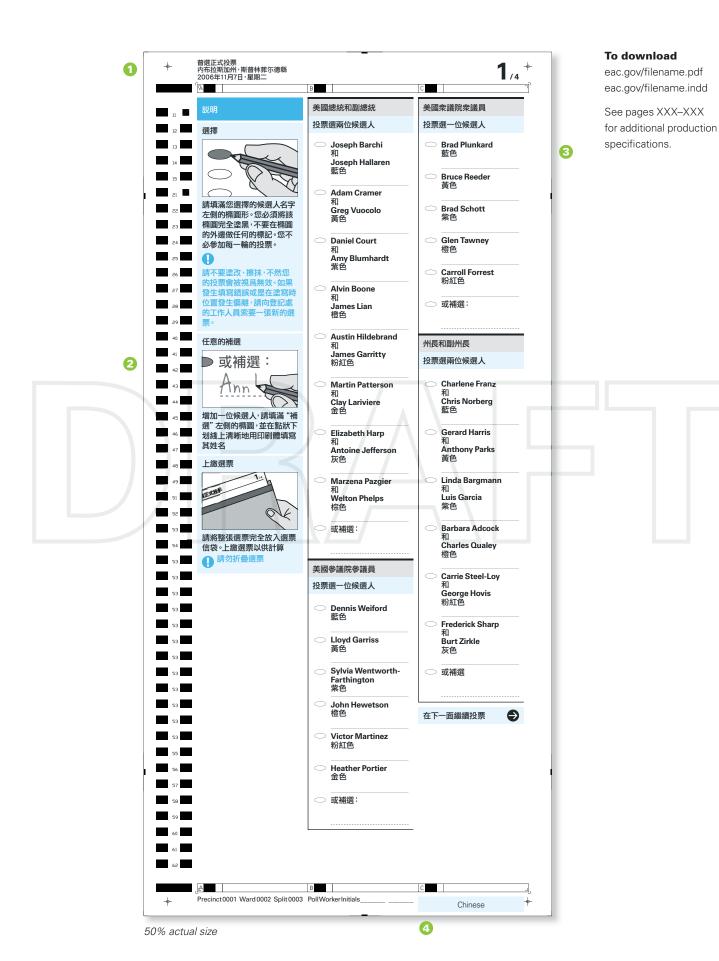
To create appropriate contrast from question instructions, question title fills should be 20% black, rather than the 15% black used on two-color ballots.

3.32 Optical scan ballots

Samples

One language

Asian language version



### **Asian language versions**

When single-language ballots are produced with Asian languages, the following areas need additional consideration:

### Typeface choices

Non-western typefaces should be selected on the basis of simplicity, compatibility with the Univers type family, and cultural appropriateness. In the application shown LeHei Pro is used for Chinese.

### Instructional illustrations

Make sure that instructional illustrations accurately reflect the language being used on the specific ballot.

### **3** Candidate names

All ballot text should be translated, and candidate and political party names transliterated.

### 4 Language indication

Though all poll workers are assumed to speak English, not all will be able to identify the language on a non-English ballot. Non-English ballots should include this block to identify the language. The block should be placed near the bottom right hand corner of the ballot, as far from ballot content as possible.

Fill: 10% process cyan, extends full width of one column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

*Type:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned, centered between top and bottom of fill.

# Design: two languages

On pages XXX–XXX design best practices for a general election two-language ballot are illustrated and their production specifications detailed. These best practices are based on are based on Voluntary Voting System Guidelines (VVSG), information design principles and usability testing.

### Components

A ballot has four basic content areas:

- A Election information (e.g., jurisdiction, general election, date)
- Ballot instructions
- Ballot navigation, including page numbers and reminders to vote on the other side or go on to the next page
- Questions, including contests, retentions and referendum

Each of these components is illustrated at its full size and production specifications are detailed on the facing page. Specifications are numbered from 1 through 6

### **Specifications**

All production specifications—including type face, type size, leading, line weights, tint fills, and distances between elements—are included. These specifications allow information designers to build best practices ballots.

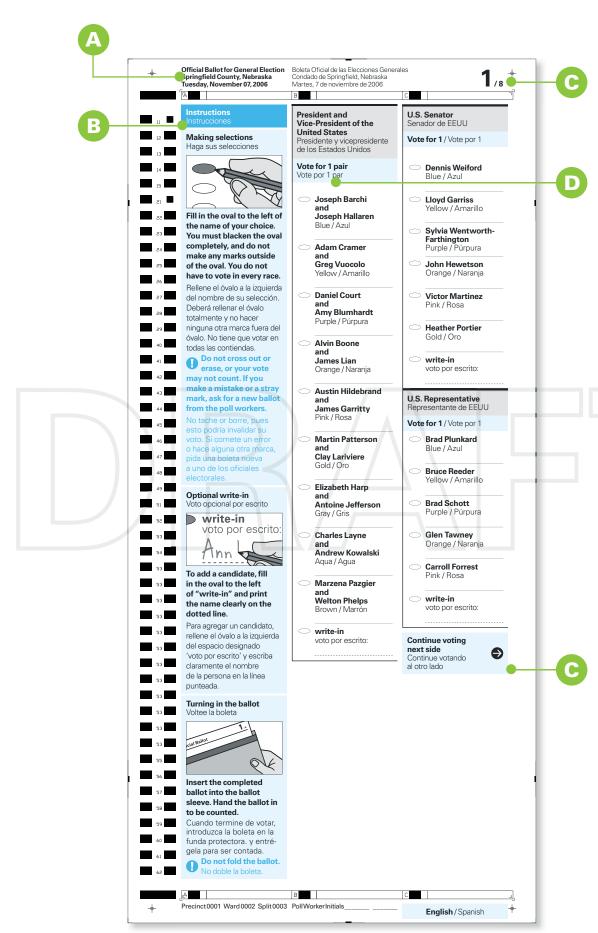
### Discussion

Non-specification notes, comments and references such as production best practices and legislative requirements may be listed under this heading.

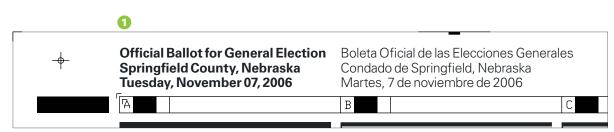
Prototype ballots shown on the following pages are not endorsements of a particular ballot manufacturer. They are used to illustrate design standards and usability findings. These component-based design standards can be applied to a variety of ballot types.

### **Research findings**

Additional research findings that further support the following ballot design best practices can be found in Section 7 of this document, and at www.eac.gov/directory\_name.



DRAFT 3.36 Optical scan ballots Design Two languages Election information



100% actual size



#### **Election information specifications**

Information defining the specifics of the election should be placed above the left column of the face of every ballot page outside the area used by the voter and the scanner. Content should include the statement "Official Ballot" along with election type, location and date. The second language should be to the right of the first, in line with the second column. Local laws may require that additional information be included.

#### Election information

On ballots with space constraints, election information may be set at a minimum size. For ballots with more available space, larger type is encouraged.

Minimum size type for all, Language One: Univers 65 Bold, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Minimum size type for all, Language Two: Univers 45 Light, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Maximum size type for title, Language One: Univers 65 Bold, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

Maximum size type for title, Language Two: Univers 45 Light, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

Maximum size type for location and date, Language One: Univers 65 Bold, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

Maximum size type for location and date, Language Two: Univers 45 Light, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

Language Two information should be set no less than 0.2" directly to the right of the longest Language One line of type.

#### **Discussion**

Though this is important content it should not be set so large that it affects the amount of room left for instructions and ballot content actually used by the voter.



2

4

**Making selections** 

Haga sus selecciones



Fill in the oval to the left of the name of your choice. You must blacken the oval completely, and do not make any marks outside of the oval. You do not have to vote in every race.

Rellene el óvalo a la izquierda del nombre de su selección. Deberá rellenar el óvalo totalmente y no hacer ninguna otra marca fuera del óvalo. No tiene que votar en todas las contiendas.

Do not cross out or erase, or your vote may not count. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.

No tache or borre, pues esto podría invalidar su voto. Si comete un error o hace alguna otra marca, pida una boleta nueva a uno de los oficiales electorales.

## **Optional write-in**

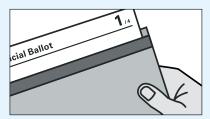
Voto opcional por escrito



To add a candidate, fill in the oval to the left of "write-in" and print the name clearly on the dotted line.

Para agregar un candidato, rellene el óvalo a la izquierda del espacio designado 'voto por escrito' y escriba claramente el nombre de la persona en la línea punteada.

# **Turning in the ballot**Voltee la boleta



Insert the completed ballot into the ballot sleeve. Hand the ballot in to be counted.

Cuando termine de votar, introduzca la boleta en la funda protectora. y entrégela para ser contada.



all 100% actual size

#### **Ballot instruction specifications**

Specifications for each element in a section are referenced by number below.

#### Main head

This header defines the complete instructions area for the voter.

Fill: 100% process cyan, 0.5" height, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

*Type, Language One:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

## Background fill

3 pt. white line between background tint and main head. 3 pt. white line between each instruction.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type for each instruction.

## Subhead

Begins 0.1" below top of fill.

*Type, Language One:* Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages.

#### Illustration

Begins 0.1" below lowest baseline of title.

Size: 0.1" inset from column width on both sides; height determined by most effective display of illustration (typically 1" to 2").

Stroke: 0.5 pt. line, 100% black.

#### 5 Instruction text

Begins 0.1" below bottom of illustration.

*Type, Language One:* Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Space between languages should be 0.1".

#### 6 Alerts

These should be used only for critical instructions, such as actions that may invalidate a voter's ballot. Begins 0.1" below lowest baseline of instruction content.

Attention icon: 0.25" diameter, 100% process cyan, set 0.1" from left edge of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill and 0.1" below Attention icon.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill.

Space between languages should be 0.1".

#### Discussion

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

Illustrative diagrams that accurately reflect the ballot type and equipment further clarify instructions and processes.

These illustrations are available at www.eac.gov/directory\_name.

Informational icons are used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.







Continue voting next side
Continue votando

al otro lado



Continue voting next page

Continue votando en la próxima página



Thank you for voting! Please turn in your finished ballot

¡Gracias por votar! Entregue su boleta a un oficial electoral

all 100% actual size

#### **Ballot navigation specifications**

Specifications for each instruction element are referenced by number below.

#### Page numbering

Current and total page numbers should be placed in the top right corner of each face of every ballot page.

Current page type: Univers 65 Bold, size 36 pt., tracking -20, 100% black.

Total page type: Univers 65 Bold, size 12 pt., tracking -20, 100% black.

#### Instruction fill

Navigational instructions should be placed at the end of the final column on each ballot face, to tell the voter what to do next.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

## Instruction content

Begins 0.1" below top of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

## 4 Arrow

Use the Arrow icon when directing the voter to another location on the ballot.

Arrow icon: 0.25" diameter, 100% black, set 0.1" from right edge of fill, centered between top and bottom of fill.

#### **Discussion**

These ballot navigation guides help move the voter through the ballot, telling them where they are in the process and where to go next.

Ballot pages should be numbered with large bold numbers to aide in ballot completion.

Informational icons such as arrows and exclamation points (next page) are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov/directory\_name.

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.



Design

Two languages

Contest questions

0

U.S. Senator

Senador de EEUU

**Over Sommary** Vote por 1

Oennis Weiford
Blue / Azul

Cloyd Garriss
Yellow / Amarillo

Sylvia Wentworth-Farthington Purple / Púrpura

Orange / Naranja

Victor Martinez
Pink / Rosa

Heather Portier
Gold / Oro

write-in voto por escrito:

State Governor and Lieutenant-Governor

Gobernador y Teniente-Gobernador

**Vote for 1 pair** Vote por 1 par

Charlene Franz and Chris Norberg Blue / Azul

Gerard Harris and Anthony Parks Yellow / Amarillo

Linda Bargmann and Luis Garcia Purple / Púrpura

Barbara Adcock and Charles Qualey Orange / Naranja

Carrie Steel-Loy and George Hovis Pink / Rosa

Frederick Sharp and Burt Zirkle Gray / Gris

write-in voto por escrito:

Board of Education Member: City of Springfield

Miembro de la Comisión de Educación: Ciudad de Springfield

∇ote for up to 5

Vote por un máximo de 5

Albert Musgrove

Alex Marr

Thomas Fleming

Harriett Watson

Theodore Fina

Steven Williams

Peter Sigelakis

Deborah Barkelow

write-in voto por escrito:

-----

all 100% actual size

4

#### **Contest question specifications**

Contest question components include borders that separate each contest, titles, special instructions, candidate/ticket information and choices.

#### Border

This border defines the top, left and bottom sides of the contest.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

#### Contest title

This header defines each contest question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

#### **3** Contest instructions

This area defines each contest's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

*Type, Language One:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

## Special instructions

When new or modified instructions are introduced, they should be called out to alert the voter. These are set identically to standard contest instructions, with the addition of an Attention icon.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Attention icon: 0.15" diameter, 100% process cyan, set 0.1" from left edge of fill, centered between top and bottom of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon.

Do not add additional space between languages. Type is centered between top and bottom of fill.

#### Discussion

Informational icons such as exclamation points and arrows are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov/directory\_name.

The use of political The use of political party icons is not encouraged, because literacy experts and design professionals believe they simply confuse many voters.

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

Pink / Rosa

Frederick Sharp

**Burt Zirkle** Gray / Gris

voto por escrito:

and

write-in

	<b>U.S. Senator</b> Senador de EEUU	State Governor and Lieutenant-Governor
	Vote for 1 / Vote por 1	Gobernador y Teniente-Gobernador
5	Dennis Weiford	<b>Vote for 1 pair</b> Vote por 1 par
	Blue / Azul	Charlene Franz
6	Cloyd Garriss Yellow / Amarillo	Chris Norberg Blue / Azul
	Sylvia Wentworth- Farthington Purple / Púrpura	Gerard Harris and Anthony Parks Yellow / Amarillo
	John Hewetson	Tellow / Amarillo
	Orange / Naranja  Victor Martinez	Linda Bargmann and Luis Garcia
	Pink / Rosa	Purple / Púrpura
	Gold / Oro	Barbara Adcock and Charles Qualey Orange / Naranja
	write-in	
7	voto por escrito:	Carrie Steel-Loy and George Hovis

## **Board of Education** Member: **City of Springfield** Miembro de la Comisión de Educación: Ciudad de Springfield Vote for up to 5 Vote por un máximo de 5 Alex Marr **Albert Musgrove Thomas Fleming Harriett Watson Theodore Fina Steven Williams Peter Sigelakis** Deborah Barkelow write-in voto por escrito: write-in voto por escrito: write-in voto por escrito: write-in voto por escrito: voto por escrito: \_\_\_\_\_ all 100% actual size

#### Contest question specifications, continued

#### Candidate information

First name should begin no less than 0.1" below bottom of instructions fill; on ballots with set selection locations, the distance may need to be greater. Subsequent names should begin 0.1" below separation line of previous candidate. Names should be set as close as possible to the selection location.

*Name type:* Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Party type: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned. On contests with a two-person ticket, the word "and" should be placed alone on a separate line between the two candidate names.

## 6 Separation line

Each candidate option should be followed by a line to clearly define it, even if it is the final option in a particular contest. Line should be placed no less than 0.1" below the lowest baseline of candidate information; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following candidate name, if applicable.

*Line:* 0.25 pt. line, 100% black, extends full width of column area allowed for candidates.

#### Write-in

Begins 0.1" below final line of previous candidate. Write-in line should be placed no less than 0.3" below lowest baseline of type; on ballots with set selection locations, the distance may need to be greater.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages.

Write-in line: 0.5 pt. line, dashed 4 pt./4 pt., 100% black, extends full width of column area allowed for candidates.

#### Discussion

All candidates in any given contest should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the candidate/ ticket name as shown on page XXX.



Judge Retention:
State Supreme Court
Retención de Juez:
Tribunal Supremo del Estado

Ote to keep or remove
Vote para retener or remover del puesto

Retain Robert Demergue as Chief Justice of the State Supreme Court?

¿Se deberá retener a Robert Demergue como presidente del Tribunal Supremo del Estado?

**Keep Judge**Retener a este juez

Remove Judge
Remover a este juez

100% actual size

6

#### **Retention question specifications**

Retention question components include borders that separate each question, titles, special instructions, the question and the choices.

#### Border

This border defines the top, left and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

#### Retention title

This header each retention question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

## **3** Retention instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

#### Retention content

Presents the question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill.

*Type, Language One:* Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

Space between languages should be 0.1".

## 6 Retention selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

#### Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

*Line:* 0.25 pt. line, 100% black, extends full width of column area allowed for selection options.

#### **Discussion**

The decision to apply color only to instructions is the result of feedback from usability testing and literacy experts.

All names in any given retention question should all be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the judge's name as shown on page XXX.

Ballot Measure 101: Open Primaries

Medida de Votación 101: Elecciones primarias abiertas

3 Vote to accept or reject
Vote para aceptar o rechazar

Requires primary elections where voters may vote for any state or federal candidate regardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments.

Estas traducciones no son exactas. Solo son utilizadas en esta boleta, como ejemplo. federal a pesar de matrícula de partido de votante o candidato. Los dos candidatos de la primaria que reciben la mayoría de los votos para una oficina, si ellos son candidatos con ningún partido ni miembros del partido mismo ni diferente, serían listados en la votación de elección general. Exime los nombramientos presidenciales. El Impacto fiscal: Ningún efecto fiscal, neto y significativo en el estado y administraciones municipales.

**5** 

Accept / Acepto

Reject / Rechazo

100% actual size

#### Referendum specifications

Referendum question components include borders that separate each question, titles, instructions, the question and the choices. Referendum should span either two or three columns, depending on available ballot space. This variable column width is noted below as the "referendum area."

#### Border

This border defines the top, left and bottom sides of the question.

*Top:* 3.0 pt. line, 100% black, extends full width of the referendum area.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the referendum area; placed 0.1" below last content in referendum area.

### Referendum title

This header defines each referendum question; it begins directly below the top border.

Fill: 15% black, extends full width of the referendum area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

#### Referendum instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the referendum area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

*Type, Language One*: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

#### 4 Referendum content

Presents the referendum question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill, set 0.1" from left border. Referendum area should be divided into two equal columns separated by 0.5" with one language placed in each.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

#### Referendum selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location, ideally in the left-most column of the referendum area.

Option type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of referendum area.

Option type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of referendum area.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

#### Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

*Line*: 0.25 pt. line, 100% black, extends full width of referendum area allowed for selection options.

#### **Discussion**

See page XXX.

## Samples: two languages

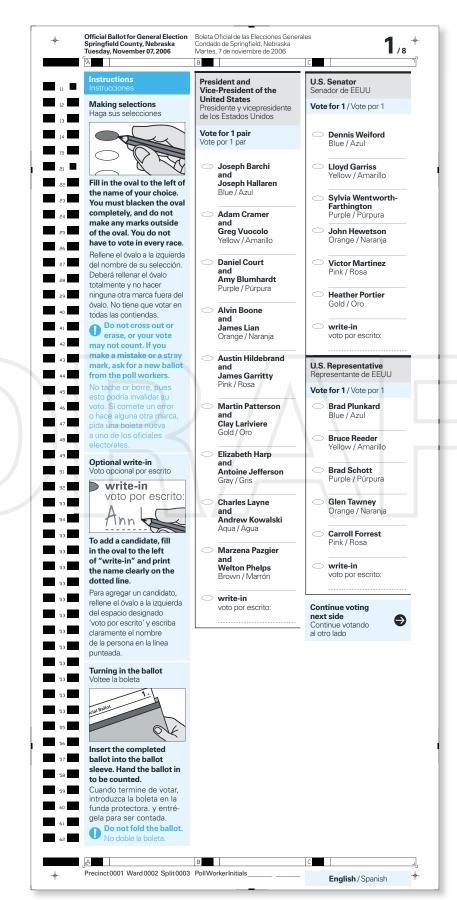
The design best practices detailed in the previous section are applied to various one-color ballots on pages XXX–XXX. The variations include two ballot styles, a one-color version and a Asian language version.

Specifications that vary from those outlined in the Design section are detailed opposite the application example. The samples show that the design best practices are flexible and can be applied to a variety of ballot types.

The ballot content used in these samples was originally developed by the National Institute of Standards and Technology (NIST) to illustrate a "moderately complex" ballot. Although it is impossible to cover every ballot scenario, most general election ballot layout issues can be addressed.

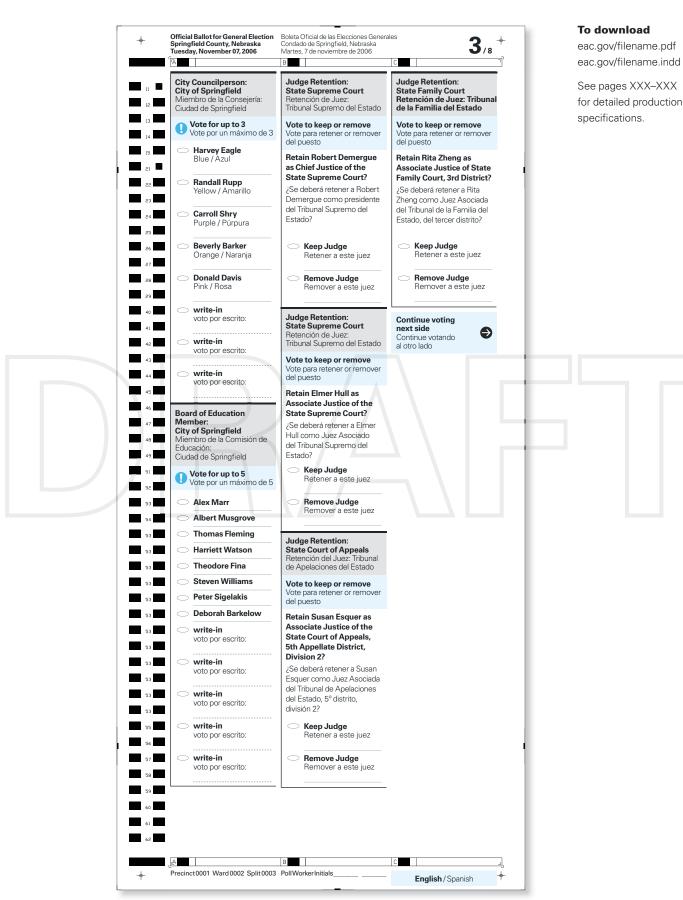
The samples shown on the following pages are not endorsements of a particular ballot manufacturer. They are used to illustrate design standards and usability findings.



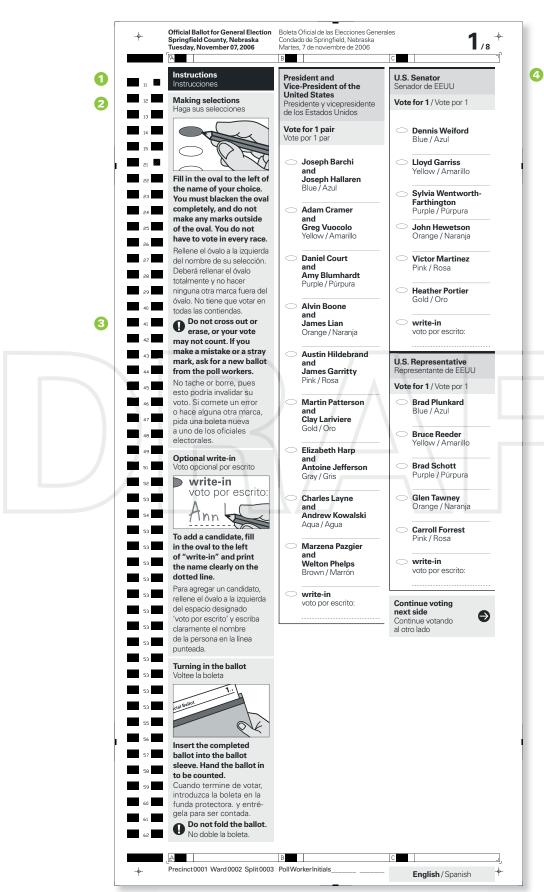


eac.gov/filename.pdf eac.gov/filename.indd

See pages XXX–XXX for detailed production specifications.







eac.gov/filename.pdf eac.gov/filename.indd

See pages XXX–XXX for additional production specifications.

3.55 Optical scan ballots Samples Two languages One-color version

## **One-color version specifications**

If circumstances dictate that ballots be printed in only one color, certain adjustments should be made to the specifications of the ballot.

## 1 Instruction head

Rather than process cyan, this header should be 100% black.

#### Instructional fills

Rather than screened process cyan, all instructional fills should be 10% black. This includes the fills used with all ballot instructions, question instructions, and all navigational instructions.

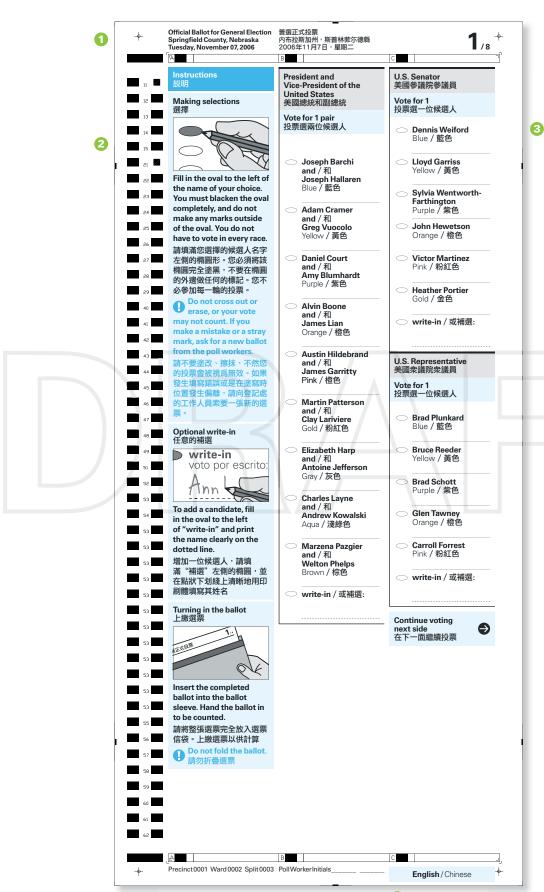
#### 3 Attention icons

Rather than process cyan, all Attention icons should be 100% black. This includes icons for critical ballot instructions, as well as special question instructions.

#### Question titles

To create appropriate contrast from question instructions, question header fills should be 20% black, rather than the 15% black used on two-color ballots.

3.56 Optical scan ballots



eac.gov/filename.pdf eac.gov/filename.indd

See pages XXX–XXX for additional production specifications.

## **Asian language versions**

When dual-language ballots are produced for non-English languages, certain situations should be considered.

## Typeface choices

Non-western typefaces should be selected on the basis of simplicity, compatibility with the Univers type family, and cultural appropriateness. In the application shown LeHei Pro is used for Chinese.

#### Instructional illustrations

Make sure that instructional illustrations accurately reflect the language being used on the specific ballot.

#### Candidate names

All ballot text should be translated, and candidate and political party names transliterated.

## 4 Language indication

Although it is assumed that all poll workers will speak English, not all will be able to identify the language on a non-English ballot. Non-English ballots should include this block to identify the language. The block should be placed near the bottom right hand corner of the ballot, as far from ballot content as possible.

Fill: 10% process cyan, extends full width of one column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned.

*Type, Language Two:* Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned.

Use forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

#### **Discussion**

Translators ensure proper grammatical, syntactic, and structural character of the content and appropriate use of local dialect variations. Obviously, accurate translations are vital for non-English-speaking voters. Online translations often are misleading, unclear, or simply wrong. The EAC can provide some model translations.

A cultural expert can review translated material to ensure that the translations are accurate and culturally relevant, and that their visual presentation is appropriate.

